REMARKS

The Office Action mailed February 4, 2004 has been carefully reviewed and the forgoing amendment and following remarks are made in consequence thereof.

Claims 1, 3, 5, 6, and 26-30 are pending in this application. Claims 1, 3, 5, 6, and 26-30 are rejected. Claims 2, 4, and 7-25 have been canceled.

The rejection of Claims 1, 3, 5, 6, and 26-30 under 35 U.S.C. § 112, first paragraph is respectfully traversed. Claims 1 and 26 have each been amended to remove references to "normal" with respect to first and second modes of operation. Accordingly, for at least the reasons set forth above, Applicants respectfully request the rejection to Claims 1, 3, 5, 6, and 26-30 under section 112, first paragraph be withdrawn.

The rejection of Claims 1, 3, 5, 6, and 26-30 under 35 U.S.C. § 112, second paragraph is respectfully traversed. Claims 1 and 26 have each been amended to remove references to "normal" with respect to first and second modes of operation. Accordingly, for at least the reasons set forth above, Applicant requests the Section 112, second paragraph, rejections of Claims 1, 3, 5, 6, and 26-30 be withdrawn.

The rejection of Claims 1, 3, 5 and 26-29 under 35 U.S.C. § 102(b) as being anticipated by the admitted prior art within the specification is respectfully traversed.

Applicant's admitted prior art (AAPA) describes an essential requirement of a nuclear reactor protection system during abnormal system operation. More specifically, during abnormal system operations, at least some known nuclear facilities include a shut-down system or a safe operation system which may automatically effect remedial action, such as repositioning the reactor valve alignment from a normal operating mode to an emergency operating mode, to facilitate preventing an unsafe or potentially unsafe condition. After the unsafe conditions have been resolved, systems are returned to a standby mode, wherein an operator manually aligns and visually verifies the reactor for other operating system modes.

Claim 1, recites a method for operating a system that includes a plurality of valves, dampers, motors, and pumps, the system is operable in a plurality of operating modes that each include interlocks between the modes wherein the method includes, "operating the system in a first operating mode, the first operating mode comprising a predetermined

configuration of valves, dampers, motors, and pumps...selecting a second operating mode to switch the system operation to...receiving a signal indicative of the system meeting permissive requirements for entering the selected mode...initiating a predetermined time delay...resetting each of the plurality of operating modes during the time delay...switching the system to a second operating mode without going to a standby mode, the second operating mode comprising a predetermined configuration of valves, dampers, motors, and pumps different than the first operating mode, and wherein at least one of the valves, dampers, motors, or pumps is positioned to a different operating position in the second operating mode than that respective valve, damper, motor, or pump was positioned for operation during the first operating mode."

Applicant's admitted prior art does not describe nor suggest a method for operating a system wherein the method includes operating the system in a first operating mode, selecting a second operating mode to switch the system operation to, receiving a signal indicative of the system meeting permissive requirements for entering the selected mode, initiating a predetermined time delay, resetting each of the plurality of operating modes during the time delay, and switching the system to a second operating mode without going to a standby mode wherein the second operating mode includes a predetermined configuration of valves, dampers, motors, and pumps different than the first operating mode, and wherein at least one of the valves, dampers, motors, or pumps is positioned to a different operating position in the second operating mode than that respective valve, damper, motor, or pump was positioned for operation during the first operating mode. Specifically, Hench et al. do not describe nor suggest selecting a second operating mode to switch the system operation to, receiving a signal indicative of the system meeting permissive requirements for entering the selected mode, initiating a predetermined time delay, resetting each of the plurality of operating modes during the time delay, and switching the system to a second operating mode without going to a standby mode. Rather, in contrast to the present invention, Applicant's admitted prior art describes switching the operation of the system automatically, such as shutdown without operator intervention, during abnormal system operations, and also describes that once abnormal operations have ceased, the system is initially returned to a standby mode, prior to returning to a normal operating mode. Accordingly, for at least the reasons set forth above, Claim 1 is submitted to be patentable over the Applicant's admitted prior art.

Claims 3 and 5 depend directly from independent Claim 1. When the recitations of Claims 3 and 5 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 3 and 5 likewise are patentable over the Applicant's admitted prior art.

Claim 26 recites a method for operating a nuclear power plant system that is operable in a plurality of operating modes that each include interlocks between the modes wherein the method includes, "operating the system in a first operating mode, the first operating mode comprising a predetermined configuration of valves, dampers, motors, and pumps...selecting a second operating mode to switch the system operation to...receiving a signal indicative of the system meeting permissive requirements for entering the selected mode...initiating a predetermined time delay...resetting each of the plurality of operating modes during the time delay...switching the system to a second operating mode without going to a standby mode, the second operating mode comprising a predetermined configuration of valves, dampers, motors, and pumps different than the first operating mode, and wherein at least one of the valves, dampers, motors, or pumps is positioned to a different operating position in the second operating mode than that respective valve, damper, motor, or pump was positioned for operation during the first operating mode."

Applicant's admitted prior art does not describe nor suggest a method for operating a system wherein the method includes operating the system in a first operating mode, the first operating mode comprising a predetermined configuration of valves, dampers, motors, and pumps, selecting a second operating mode to switch the system operation to, receiving a signal indicative of the system meeting permissive requirements for entering the selected mode, initiating a predetermined time delay, resetting each of the plurality of operating modes during the time delay, switching the system to a second operating mode without going to a standby mode, the second operating mode comprising a predetermined configuration of valves, dampers, motors, and pumps different than the first operating mode, and wherein at least one of the valves, dampers, motors, or pumps is positioned to a different operating position in the second operating mode than that respective valve, damper, motor, or pump was positioned for operation during the first operating mode. Specifically, Hench et al. do not describe nor suggest selecting a second operating mode to switch the system operation to, receiving a signal indicative of the system meeting permissive requirements for entering the selected mode, initiating a predetermined time delay, resetting each of the plurality of

operating modes during the time delay, and switching the system to a second operating mode without going to a standby mode. Rather, in contrast to the present invention, Applicant's admitted prior art describes switching the operation of the system during abnormal system operations, and also describes that once abnormal operations have ceased, the system is initially returned to a standby mode, prior to returning to a normal operating mode. Accordingly, for at least the reasons set forth above, Claim 26 is submitted to be patentable over the Applicant's admitted prior art.

Claims 27-29 depend directly from independent Claim 26. When the recitations of Claims 27-29 are considered in combination with the recitations of Claim 26, Applicant submits that dependent Claims 27-29 likewise are patentable over the Applicant's admitted prior art.

For the reasons set forth above, Applicants respectfully request that the Section 102(b) rejection of Claims 1, 3, 5 and 26-29 be withdrawn.

The rejection of Claims 1, 3, 5, 6, and 26-30 under 35 U.S.C. § 102(b) as being anticipated by Hench et al. (U.S. Pat. No. 4,421,716) is respectfully traversed.

Hench et al. describe a Boiling Water Reactor (BWR) nuclear power plant that includes a safety monitoring system that provides summary information from a plurality of operating systems to an operator. The safety monitor is operational at all times, but is not intended for use during normal operation of the plant. Rather, during normal system operations, the safety monitor operates in standby mode, during which a plurality of pushbuttons (1-6) may be selectively activated to selectively view a system status and/or graphical trend displays. Although the safety monitor displays abnormal conditions, the system safety monitor does not change the operations of the plant, but rather the safety monitor may automatically change from displaying one status to that of another status during non-normal operations. For example, the primary output (graphical trend displays) is displayed unless an operator selects a secondary output by pushing a button associated with that display, wherein the secondary display is displayed as long as the button is depressed. A CRT screen (9) automatically reverts to the primary display when the button is released.

Claim 1 recites a method for operating a system that includes a plurality of valves, dampers, motors, and pumps, the system is operable in a plurality of operating modes that

each include interlocks between the modes wherein the method includes, "operating the system in a first operating mode, the first operating mode comprising a predetermined configuration of valves, dampers, motors, and pumps...selecting a second operating mode to switch the system operation to...receiving a signal indicative of the system meeting permissive requirements for entering the selected mode...initiating a predetermined time delay...resetting each of the plurality of operating modes during the time delay...switching the system to a second operating mode without going to a standby mode, the second operating mode comprising a predetermined configuration of valves, dampers, motors, and pumps different than the first operating mode, and wherein at least one of the valves, dampers, motors, or pumps is positioned to a different operating position in the second operating mode than that respective valve, damper, motor, or pump was positioned for operation during the first operating mode."

Hench et al. do not describe nor suggest a method for operating a system wherein the method includes operating the system in a first operating mode, selecting a second operating mode to switch the system operation to, receiving a signal indicative of the system meeting permissive requirements for entering the selected mode, initiating a predetermined time delay, resetting each of the plurality of operating modes during the time delay, and switching the system to a second operating mode without going to a standby mode wherein the second operating mode includes a predetermined configuration of valves, dampers, motors, and pumps different than the first operating mode, and wherein at least one of the valves, dampers, motors, or pumps is positioned to a different operating position in the second operating mode than that respective valve, damper, motor, or pump was positioned for operation during the first operating mode. Specifically, Hench et al. do not describe nor suggest selecting a second operating mode to switch the system operation to, receiving a signal indicative of the system meeting permissive requirements for entering the selected mode, initiating a predetermined time delay, resetting each of the plurality of operating modes during the time delay, and switching the system to a second operating mode without going to a standby mode. Rather, in contrast to the present invention, Hench et al. describe a safety monitor that is operable in a standby mode during normal operations to provide summary information regarding a plurality of operating systems. Accordingly, for at least the reasons set forth above, Applicant respectfully submits that Claim 1 is patentable over Hench et al.

Claims 3, 5, and 6 depend directly from independent Claim 1. When the recitations of Claims 3, 5, and 6 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 3, 5, and 6 likewise are patentable over Hench et al.

Claim 26 recites a method for operating a nuclear power plant system that is operable in a plurality of operating modes that each include interlocks between the modes wherein the method includes, "operating the system in a first operating mode, the first operating mode comprising a predetermined configuration of valves, dampers, motors, and pumps...selecting a second operating mode to switch the system operation to...receiving a signal indicative of the system meeting permissive requirements for entering the selected mode...initiating a predetermined time delay...resetting each of the plurality of operating modes during the time delay...switching the system to a second operating mode without going to a standby mode, the second operating mode comprising a predetermined configuration of valves, dampers, motors, and pumps different than the first operating mode, and wherein at least one of the valves, dampers, motors, or pumps is positioned to a different operating position in the second operating mode than that respective valve, damper, motor, or pump was positioned for operation during the first operating mode."

Hench et al. do not describe nor suggest a method for operating a system wherein the method includes operating the system in a first operating mode, the first operating mode comprising a predetermined configuration of valves, dampers, motors, and pumps, selecting a second operating mode to switch the system operation to, receiving a signal indicative of the system meeting permissive requirements for entering the selected mode, initiating a predetermined time delay, resetting each of the plurality of operating modes during the time delay, switching the system to a second operating mode without going to a standby mode, the second operating mode comprising a predetermined configuration of valves, dampers, motors, and pumps different than the first operating mode, and wherein at least one of the valves, dampers, motors, or pumps is positioned to a different operating position in the second operating mode than that respective valve, damper, motor, or pump was positioned for operation during the first operating mode. Specifically, Hench et al. do not describe nor suggest selecting a second operating mode to switch the system operation to, receiving a signal indicative of the system meeting permissive requirements for entering the selected mode, initiating a predetermined time delay, resetting each of the plurality of operating modes during the time delay, switching the system to a second operating mode without going

to a standby mode. Rather, in contrast to the present invention, Hench et al. describe a safety monitor that is operable in a standby mode during normal operations to provide summary information regarding a plurality of operating systems. Accordingly, for at least the reasons set forth above, Applicant respectfully submits that Claim 26 is patentable over Hench et al.

Claims 27-30 depend directly from independent Claim 26. When the recitations of Claims 27-30 are considered in combination with the recitations of Claim 26, Applicant submits that dependent Claims 27-30 likewise are patentable over Hench et al.

For the reasons set forth above, Applicants respectfully request that the Section 102(b) rejection of Claims 1,3, 5, and 26-30 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

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